



Fish & Wildlife News

September/October 2000

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The Fish and Wildlife Service Line-Up

You can't tell the players without a program so here's the new Service line-up.

Washington Office



Jamie Rappaport Clark Director



Marshall Jones Deputy Director



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Tom Melius Assistant Director/ Migratory Birds and State Programs



Dan Ashe Chief/National Wildlife Refuge Sustem



Kevin Adams Assistant Director/ Law Enforcement

Region 1



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Rick Coleman Assistant Regional Director/ External Affairs



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David McMullen Assistant Regional Director/ Law Enforcement



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Carolyn Bohan Regional Chief/National Wildlife Refuge System



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Region 2



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Tom Bauer Assistant Regional Director/ External Affairs



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Director/
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Frank Shoemaker Assistant Regional Director/ Law Enforcement



Dom Ciccone Regional Chief/ National Wildlife Refuge System

Vacant at press time:

Assistant Regional Director/Migratory Birds and State Programs

Region 3



Bill Hartwig Regional Director



Marvin Moriarty Deputy Regional Director



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Assistant Regional
Director/
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Nita Fuller Regional Chief/ National Wildlife Refuge System

Vacant at press time: Assistant Regional Director/External Affairs Assistant Regional Director/Migratory Birds and State Programs

All photos: FWS. continued on page 4

The Fish and Wildlife Service Line-Up (continued)

Region 4



Sam D. Hamilton Regional Director



 $\begin{array}{c} \textbf{Dale Hall} \\ Deputy \ Regional \\ Director \end{array}$



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Region 5



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Region 6



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Ken McDermond Regional Chief/ National Wildlife $Refuge\ System$

Vacant at press time: Assistant Regional Director/External Affairs

No photo available: Mary Gessner

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Region 7



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Janet Hohn Assistant Regional Director/ International Affairs



Glenn Elison Assistant Regional Director/ Migratory Birds and State Programs



Tom Boyd Assistant Regional Director/ Subsistence



Todd Logan Regional Chief/ National Wildlife Refuge System

Vacant at press time: $Assistant\ Regional\ Director/Law\ Enforcement$

No photo available: Stan Pruszenski Assistant Regional Director/Law Enforcement

Lead Poisoning Claims Lives of 3 Condors

FWS, Agriculture Renew Education Commitment



Tragedy. Biologists suspect lead poisoning is the cause of death for four California condors in Arizona. Photo: Arizona Game and Fish Department.

Biologists confirmed that lead poisoning was the cause of death of three of four California condors found dead this spring in northern Arizona. Lead toxicity is also suspected in the other death. Biologists found 17 lead shotgun pellets in the digestive system of one dead condor.

Two other condors are being treated for lead poisoning. The remaining 16 of the 20 living in the wild in Arizona have been captured or are being captured for further testing. They will be treated if necessary.

Eight condors have moderate to extreme lead toxicity levels with six lead pellets surgically removed from one bird.

Since the Condor Project—a cooperative effort among the Service, the Bureau of Land Management, Arizona Game and Fish, and the Peregrine Fund, among others—began in December 1996, 21 of 35 condors released in Arizona have survived. Until recently, deaths were largely restricted to young, inexperienced birds. These deaths mark the first confirmed lead toxicity in condors in Arizona.

Biologists hope the lead poisoning losses will not halt the progress the project has already made.

"The public/private partnership to recover condors has proven very successful and we hope this is only a temporary setback," said David L. Harlow, field supervisor for the Service's Arizona Ecological Services Field Office.

The latest condor deaths began in March when Condor 116 was found dead along the Colorado River within the Grand Canyon, of suspected lead poisoning. As a result, all 24 condors in the wild in Arizona were trapped and tested in mid-April. At that time only condor 119 was found to have elevated lead levels. She was treated and subsequently re-released.

Despite having a clean bill of health in April, condors 165, 191 and 182 were found dead between June 12 and 20. Condor 150's stationary radio signal was isolated in an inaccessible location on July 2. It is presumed dead.

The source of the lead has not been found; the most likely scenario is that the birds consumed a carcass, or carcasses, that had been contaminated with lead shot.

As of July 1, there were 171 California condors in the world—48 in the wild in California and Arizona and 123 in captive breeding facilities.

Compiled by Rachel F. Levin, Public Affairs, Washington, D.C. The Service and Department of Agriculture in August renewed a 24-year-old partnership that enables both agencies to continue working together to develop educational programs on wildlife, fish and related natural resources that will be disseminated to private landowners and managers, among others.

Cathleen Short, assistant director for Fisheries and Habitat Conservation, representing Service Director Jamie Rappaport Clark, and Dr. Charles Laughlin, administrator of the Department of Agriculture's Cooperative State Research, Education and Extension Service, signed the memorandum of understanding that joins both agencies' forces in the production of a wide array of educational tools.

The cooperative arrangement has produced more than 300 books, brochures, posters, pamphlets, conferences, curricula and videos since 1977, ranging from the Wildlife Habitat Evaluation Program—which helps more than 10,000 young people each year reestablish a connection to the land—to an award-winning video on urban geese management.

"These products have succeeded, time after time, in helping educate the public in a way that neither organization could do on its own," said Short, who also applauded assistance that many of the projects have received from the private sector as well as a number of non-government organizations.

Target audiences cover all segments of the U.S. population, made easier to reach by Extension's presence in every county in the nation, with a mission that includes delivery of science-based education.

Ken Burton, Public Affairs, Washington, D.C.

Waterbird Paradise Rises from Dredged Material

Mere mortals may not be able to move mountains, but using material dredged from the Houston Ship Channel as it underwent expansion, biologists and engineers in Texas created a six-acre, 12-foot-high island in the Gulf of Mexico's largest estuary.

Biologists hope Bird Island will soon be nesting habitat for hundreds of colonial waterbirds. It is already an example of the power of partnerships.

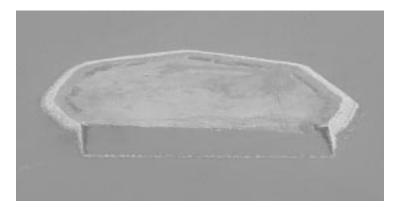
Bird Island is thought to be the first island designed for using dredged material specifically as a nesting site for colonial waterbirds—including black skimmers, roseate spoonbills, reddish egrets, gull-billed terns and endangered brown pelicans. Located just a mile and a half off the north shoreline of the Bolivar Peninsula in lower Galveston Bay, the island was completed in August.

Already, large numbers of terns, gulls and pelicans are using the island to rest, a sign that nesting success may be on the way, according to Service biologist Phil Glass, who is credited with creating the project in 1995. Glass pointed to the Bird Island project as a good example of cooperation among many federal agencies and industry.

"The construction of Bird Island shows that industry and the environment do not have to be at odds," said Glass. "Cooperation between the two interests can even bring about mutual success."

In the case of Bird Island, success demanded a concerted effort by a number of natural resources agencies, private conservation organizations and others who worked on the project.

First, dredged earth was pumped from the bottom and sides of the existing Houston Ship Channel. Where the material was deposited, biologists and engineers used a network of aquatic bulldozers, backhoes and other machinery to form the island's land mass.



A first for birds.
Bird Island is
thought to be
the first U.S.
island designed
and built for birds
using dredged
material.
FWS photo.

A sand beach was pumped in behind an offshore breakwater to form a sheltered lagoon. Fifteen thousand tons of granite form a ring of stones around the perimeter shoreline and the lagoon.

Finally, since different birds prefer different habitats for nesting, biologists have begun to plant various grasses and tree seedlings. Biologists plan to provide mulch and water in the form of slow-release watering packets to allow the plants to survive in the nutrient-poor dredged material.

Eventually this island of sludge may become a manmade paradise for the waterbirds of Galveston Bay, Glass said. It is far enough offshore to discourage predation by raccoons or coyotes, yet it is near enough to future sources of dredged material to allow periodic refurbishment if necessary. Additionally, the island is located near large areas of marsh feeding habitat but is sufficiently distant from existing waterbird colonies.

Along with the Texas Audubon Society, biologists from an interagency group of state, local and federal agencies, including the Service, will carefully manage and monitor Bird Island.

The interagency group is also responsible for planning environmentally beneficial uses for some 180 million cubic yards of dredged material expected to be produced by the channel expansion project over its projected fifty-year life span. Bird Island is just one of several environmental features resulting from the Houston Channel enlargement, which began in 1998.

Other features—such as the creation of a 1,000-acre marsh on Bolivar Peninsula—will add more than 4,000 acres of salt marsh to the Galveston Bay ecosystem, making these collective efforts one of the largest marsh creation enterprises in North America, Glass said.

"In areas like the Texas Gulf Coast, loss of important habitat such as tidal salt marsh continues because of manmade processes like ship channel dredging and water and mineral extraction started over a hundred years ago," he said. "While pure preservation is best for many wild areas, several places on the upper Texas coast have been so altered for so long they require some engineering to restore."

Ben Ikenson, External Affairs, Albuquerque, New Mexico

On the cover.

Majestic elk. Created in 1912 as a result of public interest in the survival of Wyoming's dwindling elk herd, the National Elk Refuge continues to preserve the last of the elk winter range in the valley near the town of Jackson Hole. The nearly 25,000 acre refuge was one of the first big-game refuges established. Late in October and early in November, when snow comes to the high passes, elk begin their traditional migration from high summer range in the Tetons and South Yellowstone to low winter range in the valley near Jackson Hole. Heavy snows force the animals to lower elevations in search of food. Many of the elk make their way to the National Elk Refuge. The refuge provides a winter home for an average of 7,500 elk, over half of the Jackson Hole population. FWS photo: Karen and John Hollingsworth.

Special Section: Wildland Fire

Can Wildlife Exist Without Wildland Fire?

Scientific research confirms that the survival of many plant and animal species—as well as wetlands and native grasses—is dependent on fire. The Service has historically led federal efforts to continue beneficial prescribed burning.

Human-caused wildland fire for resource management has existed side-by-side with lightning-caused fire for as long as people have used the land for hunting and agriculture. Fire—started by lighting or by humans—has been the main creator and caretaker of the nation's native prairie and forests since the ice age subsided more than 10,000 years ago. That changed less than a hundred years ago when a new federal practice of putting out all fires was instituted in the early 1900s.

After realizing that excluding fire from natural ecosystems was counterproductive, federal agencies in 1995 loosened the strict suppression policy. However, fire managers still confront more than three-quarters of a century of hazardous vegetation build-up, as well as increasing numbers of homes in or adjacent to these flammable areas.

In the Southeast, frequent fire has always been part of the cultural and natural landscape, according to Bill Leenhouts, the Service's national fire ecologist located at the National Interagency Fire Center in Boise, Idaho. Prior to moving to the fire training center, Leenhouts was a longtime Service employee in the Southeast region—home to a large percentage of national wildlife refuges.

"When the rest of the country got on the fire suppression bandwagon, the Dixie Crusaders of the 1920s and 30s just kept on burning, the way they always had," Leenhouts said. "People in the West thought there shouldn't be fire, but people in the South never got rid of it."

In fact, the first scientific proof that wild things need fire was made along the Florida/Georgia border during the early twentieth century when wealthy hunters became concerned about the decline of game bird populations. In 1931, biologist Herbert L. Stoddard discovered that the quail and wild turkey habitat of the area needed fire to keep their habitat free of shrubs and woody plants.



Helping nature along. Prescribed burns, like this one at Oklahoma's Salt Plains NWR, help reduce vegetation build-up and rejuvenate wildlife habitat. FWS photo: John and Karen Hollingsworth.

Following Stoddard's bird studies in the Southeast, University of Wisconsin ecologists Ted Sperry and John Curtis discovered that prairie habitats also needed fire to thrive. Their work during the 1940s determined that wildland fire sprouted the seeds of native plant species and killed exotic weeds. These findings led to the regular use of controlled burns to restore native prairie and eradicate weeds in Midwestern oak forests.

The use of so-called "prescribed fire" was halted in Western states after May's escaped burn on National Park Service land in Los Alamos, New Mexico. Because of the risk to homes, which are multiplying near wildland areas, this use of fire as a land and resource management tool came into question.

On June 15, Service Director Jamie Rappaport Clark issued Interim Prescribed Fire Guidelines mandating review of all previously approved prescribed fire plans, along with written certification on the day of each burn—prior to ignition—by the burn boss and the refuge manager.

Although the federal moratorium on prescribed fire has now been lifted for most agencies, the increasing costs and risks of fire will make its use more difficult in the future. For example, the state of Colorado is maintaining an indefinite ban on issuing burn permits within its boundaries, which encompass about 50 percent public land. Land managers are now being compelled to rely more on mechanical and chemical methods—such as timber harvesting or treatment with herbicides—to clear away hazardous vegetation.

But mechanical means cannot replace burning as a land management tool.

"The trouble is, there is no ecological equivalent to fire," said Leenhouts. "We have ecosystems that are tied to a natural process called fire. If we go out there with a chain saw and clear bushes, we're still going to lose species."

Karen Miranda Gleason, External Affairs, Denver, Colorado

More information on the Service's fire management activities and policies can be found on the Internet at http://fire.r9.fws.gov.

Chasing Smoke and Flames

One Sunday night in early May, as I was completing an annual ritual of packing my gear in anticipation of fire season, the phone rang. The interagency Rocky Mountain Area Coordination Center was dispatching its Type I Incident Management Team, on which I serve, to a wildland fire burning in Lincoln National Forest in southern New Mexico.

Composed of personnel with expertise in fire management, operations, planning, logistics, finance, safety and information, an incident management team suppresses large or complex fires that have grown beyond the firefighting capabilities of local jurisdictions such as national wildlife refuges and parks, and national and state forests.

I left behind my identity as a Service employee and took on my assigned role as the team's fire information officer. My duties included everything from responding to intense media attention and coordinating dignitaries' visits to comforting and reassuring distraught residents worried for their homes and neighbors.

Team members are selected every 3 years by the coordinating group, made up of the lead fire management officers and their representatives from five federal agencies—the Fish and Wildlife Service, Forest Service, National Park Service, Bureau of Land Management and Bureau of Indian Affairs—and 3 states in the area. Currently, I am the only Fish and Wildlife Service representative on the Rocky Mountain Area Type I team, which is available for fire assignments nationwide.

As I was packing, my counterparts on the Southwest Area Type I team were on their way to the Cerro Grande Fire near Los Alamos, which we flew over en route to Lincoln National Forest and the Cree Fire.

When the Rocky Mountain team arrived Monday morning, two homes had already been destroyed by fire but no one had been injured. Several nearby subdivisions were being evacuated. With hundreds of homes built on or adjacent to forest land, this was a very dangerous situation.

Lincoln National Forest fire staff had their hands full managing this wind-driven fire. They briefed us Monday night and we officially assumed command early Tuesday morning.

The week was busy. New Mexico's governor visited the site the first day, national and regional media interest remained steady, and we even saw the arrival of television crews from Mexico, looking for Spanish speakers to interview.

More resources and personnel arrived, and our fire camp grew to nearly 1,000 people as the fire spread to more than 8,000 acres. More neighborhoods were evacuated. The local community held its collective breath that week as erratic winds fanned the flames. Firefighters chased and extinguished "spots," new fires caused by flying embers.

To protect threatened homes, the team conducted several "burn-out" operations, removing flammable vegetation from around the houses. After several long days and nights, and with luck and the wind in our favor, firefighters contained the Cree Fire. After nearly a week of uncertainty, all residents were back in their homes by the weekend.

The incident management team returned command of the fire to Lincoln National Forest the following Tuesday, while mourning the previous day's tragic death of one of the forest's own—an aerial observer who died with a Forest Service-contracted pilot while working a nearby fire; the plane crash that killed them was the sole human loss of life during May's New Mexico fires.

That more lives weren't lost in these incidents is a testament to the national wildland fire management program's serious focus on safety—a prime example of successful interagency cooperation, of which I am proud to be a part.

Karen Miranda Gleason, External Affairs, Denver, Colorado

Center Offers Hands-On Training

The Southeast, which conducts more prescribed burns than any other part of the country, is also home to the National Interagency Prescribed Fire Training Center, whose founder and director is Service employee John Fort. As the only experience-based program of its kind, the center offers hands-on field training to federal and state fire personnel from across the country. Participants travel throughout the region during a three-week period to conduct burns on a variety of landscape types, helping to accomplish land management goals of several sponsoring agencies.

Founded in 1997, operated by the Service, the U.S. Forest Service and the Florida Division of Forestry with support from other federal land management agencies and private organizations, and headquartered in Tallahassee, Florida, the National Interagency Prescribed Fire Training Center recently received the Forest Service's 2000 Chief's Award for "implementing an innovative, experience-based program to transfer knowledge, technology and experience in prescribed fire applications to the national fire community."

For more information on prescribed fire training, check the center's home page on the Internet at http://fire.r9.fws.gov/pftc/default.htm.

Karen Miranda Gleason

Donated Gear Supports African Wildlife Conservation



Good deed. The Service recognized outdoor equipment retailer Cabela's for its generosity in donating law enforcement gear to African wildlife officers. Left to right, Senator Robert Kerrey of Nebraska, Richard Cabela, Senator Chuck Hagel of Nebraska, Service Director Jamie Rappaport Clark, Dr. Bill Wall of Safari Club International, Assistant Director for Law Enforcement Kevin Adams and Tom Riley of the Office of Law Enforcement. FWS photo: LaVonda Walton.

When two Service special agents flew to Kenya in July to share with African law enforcement officers techniques for investigating wildlife crime, their luggage—which included 32 large green duffel bags packed with outdoor clothing and equipment—may have seemed excessive. But both the training and the gear represent the results of a unique public/private partnership supporting efforts to combat poaching and illegal wildlife trade.

The partnership teams the Office of Law Enforcement with outdoor retailer Cabela's, which donated more than \$40,000 worth of clothing and equipment to the Lusaka Task Force, a multinational coalition of African law enforcement officers. Service Director Jamie Rappaport Clark and company co-founder and Chairman of the Board Richard Cabela announced the donation at a July 18 news conference in Washington, D.C.

Safari Club International, a nonprofit hunting and conservation organization, also supported this effort to help task force officers meet basic training and equipment needs as they work to protect elephants, rhinos and other imperiled species in nine central and southern African countries.

"We are proud to join Cabela's and Safari Club International in helping the Lusaka Task Force field a well-trained, well-equipped force to fight wildlife crime," Clark said at the news conference.

She presented the Director's Corporate Wildlife Stewardship Award to the Nebraska-based Cabela's and was joined by Nebraska Senators Chuck Hagel and Bob Kerrey in spotlighting the donation and the training.

Special Agent Doug Goessman and Senior Special Agent Gary Mowad took the donated gear—including radios, global positioning system units, compasses, backpacks, canteens, boots, belts and clothing—to Nairobi for 32 African officers attending a special three-week training program at task force headquarters there. Goessman, who is stationed in Bozeman, Montana, and Mowad, who works in Arlington, Virginia, taught an intensive, one-week course on conducting criminal investigations as part of the training.

Poaching and illegal trade are among the most serious threats to wildlife in Africa today. Conservation concerns include the slaughter of elephants for their ivory; the near extinction of the rhino; increased trafficking in chimpanzees, gorillas and other primates for the bush meat trade; and collecting and smuggling live reptiles for the exotic pet market.

Established in 1997, the Lusaka Task Force, which includes officers from Kenya, Lesotho, Tanzania, Uganda, Republic of Congo, Republic of Zambia, Ethiopia, Swaziland and South Africa, carries out the provisions of the Lusaka Agreement on Cooperative Enforcement Operations Directed at Illegal Trade in Wild Fauna and Flora. Although the first task force officers were not appointed until May 1999, the group has already conducted successful cross-border operations that intercepted hundreds of tons of ivory tusks and firearms.

Officers assigned to the task force have enforcement authority in each participating nation—an innovative and unprecedented arrangement that reflects the transboundary nature of wildlife trafficking.

Sandy Cleva, Office of Law Enforcement, Arlington, Virginia

Southwestern Willow Flycatcher Recovery Involves the Public



Big plans for a tiny bird. A recovery team has drafted a plan for bringing the Southwestern willow flycatcher back from its endangered status. FWS photo.

Each spring, the Southwestern willow flycatcher journeys thousands of perilous miles from Central and South America to breed in the few remaining dense riparian thickets bordering the Rio Grande, the Gila, the Colorado, and other rivers and streams in the arid Southwest.

In a span of three months, the male flycatcher must find suitable habitat, establish nesting territory and attract a female, who must lay and hatch eggs. Together, the pair must raise their young until they can fledge, mature and deposit fat before the arduous return to the wintering grounds.

Because of river flow reductions and habitat alteration and loss, the Southwestern willow flycatcher teeters on the brink of extinction; the Service listed it as endangered in 1995. But this tiny bird—and many others—may one day be restored thanks in part to recovery teams that study the plights of imperiled species and recommend solutions that may lead to delisting.

Because the issues associated with the Southwestern willow flycatcher's endangered status are complex and were anticipated to be contentious, the Service appointed a team in 1998 to study the threats to the bird and to provide unbiased guidance for recovery of the species. Thirteen scientists and natural resource professionals from various agencies and disciplines form the recovery effort's technical subgroup.

The group's work has not been easy.

"So far, it has been a long and complex process," said recovery team leader Debbie Finch. "But this care was needed to design an integrated and interdisciplinary plan which includes stakeholder input."

The complexities of the recovery process reflect the complexities that have contributed to the species' endangerment. The problem of riparian habitat loss — which adversely affects many species — is widespread throughout the Southwest as a result of urban and agricultural development, hydraulic modification such as dams, diversions and groundwater overdraft, fires, invasive plants, increased human population, and overgrazing by domestic livestock.

Also, the Southwestern willow flycatcher contends with brown-headed cowbirds. Cowbirds lay their eggs in the nests of other birds which expend parental care on cowbird young at the expense of their own young, ultimately reducing nesting success of birds like the flycatcher.

Because of these factors, the Service recognized that widespread participation from the public would be essential to draft not just a scientifically credible plan, but one that people would embrace. More than 300 community representatives across the Southwest—ranchers, environmental representatives, water and power interests, state and federal land managers, tribal representatives, and local governments—participated in the planning process and have the ultimate responsibility of implementing the recovery plan.

In addition to public meetings, recovery team members visited a number of sites—in California, New Mexico and Arizona—that are important habitat to the Southwestern willow flycatcher and they spoke with many private land owners.

"Input gained from the stakeholder meetings, as well as visits to known flycatcher sites, has been extremely helpful in formulating the plan," Finch said.

A Web site was developed to promote dialogue between the community representatives and recovery team members, and to elicit discussion among the scientists.

"In drafting the recovery plan, we have spent a great deal of energy reviewing and considering the abundance of varying and complex information," said Stuart Leon, Service recovery coordinator for the Southwest region.

The recovery team's recommendations have been formally documented in a draft recovery plan which will be available to the public this winter.

Ben Ikenson, External Affairs, Albuquerque, New Mexico

Invasive Plant Puts the Squeeze On



Unwelcome. Like most invasive species, giant salvinia takes over its adopted habitat, squeezing out native wildlife. FWS photo.

Giant salvinia, an invasive aquatic fern native to Brazil, is squeezing the life out of wetlands, oxbows, backwaters and canals in the lower Colorado River near the Arizona-California border—and causing headaches for Service biologists.

"It's no tiny problem dealing with giant salvinia," said Bob Pitman, the Service's aquatic nuisance species coordinator for the Southwest region and the head of a giant salvinia task force. "This plant first showed up on the lower Colorado in 1999 and is poised to spread rapidly like it has in other parts of the country. If it keeps up it's going to be a giant problem."

Once established, this plant has little—if any—value to wildlife and fish. Giant salvinia shades out submergent and emergent aquatic plants that ducks need for food and fish need for cover. Migrating waterfowl pass over ponds because there is no surface water. When mats of giant salvinia die off and decay on the bottom, oxygen is depleted from the water, effectively choking the aquatic life.

Giant salvinia reproduces simply by fragmenting. Break a piece off and both pieces keep growing. Since it floats, the wind blows it into new coves. This plant grows in large mats so fast that small ponds are covered in a matter of weeks. And the mats grow so thick, a 10-pound cinder block stays afloat for a short period.

Given just a toehold, giant salvinia can ruin hunting, fishing and swimming opportunities in short order. It also clogs irrigation and electric generation control structures.

Boats, jet skis and trailers may carry giant salvinia to otherwise uninfested waters. Cleaning aquatic plants from props, intakes and trailers before leaving the launch area can prevent the plant from spreading.

Pitman's task force—composed of representatives from federal, tribal, state and local agencies—responds to giant salvinia outbreaks. The herbicide diquat is most commonly used, but it's no panacea. It's time-consuming and expensive and it sometimes doesn't work. In the case of giant salvinia, prevention is the preferred alternative.

However, there is some hope in the war against this exotic pest.

"The Service needs to make boaters and anglers aware of this plant and what they can do to stop it dead," said Pitman. "Some preventive medicine can go a long way."

Craig Springer, Division of Fisheries, Albuquerque, New Mexico

Clark Lauds Anglers as "Passionate Conservationists"

There are no more passionate conservationists than bass anglers, and without them leading the way, the United States might have far fewer places for bass—and other fish—to spawn, feed or find cover, Service Director Jamie Rappaport Clark told a July 20 Bass Masters Classic Conservation Workshop in Chicago.

"Anglers have proven the most avid aquatic conservationists in the world," Clark told an audience of about 150 anglers, state and federal government agency representatives, and fishing equipment manufacturers.

The workshop was one of several scheduled during the 2000 Bass Masters Classic, the so-called "Super Bowl of Fishing Tournaments," held July 17–23 in conjunction with the International Conference of Allied Sportfishing Trades show at Chicago's sprawling McCormick Place convention center. The show featured several acres of displays of the latest in sportfishing equipment, including everything from fishing line to poles and trucks, special marine motor oil, and boats.

It is only fitting, Clark said, that "every year, anglers and boaters, the fishing and boating industry, the state fish and wildlife agencies and, of course, the U.S. Fish and Wildlife Service, should all come together and celebrate this wonderful sport."

Clark said that just as conservation efforts such as those practiced by bass anglers have helped make the Bass Masters Classic—"fishing's big party"—possible, so has the Sport Fish Restoration Program, which turned 50 years old in August. Clark said in the program's five decades, it has provided nearly \$4 billion to state fish and wildlife agencies to further boating and recreational opportunities.

She called the program "one of the most successful user-pay programs ever established," and said in the past 10 years alone, it has helped states stock more than 3.8 billion fish, has provided fishing and aquatic ecology education to 4.7 million students, financed research projects to aid fish management and has helped build 1,700 new boating access areas and 3,300 new fishing access areas.

Refuge Reveals Ceramic Piece of the Past

Clark also noted that:

- The Service remains strongly committed to supporting hunting and fishing and in the last few years has increased hunting and fishing opportunities on national wildlife refuges.
- The Service remains an enthusiastic supporter of the Recreational Boating and Fishing Foundation, which is preparing a \$5 million national outreach plan to boost participation in sport fishing and boating in the United States (see article, page 23).
- The Sport Fishing and Boating Partnership Council, under the leadership of Helen Sevier, has performed a valuable service by putting together 28 recommendations to strengthen and improve the Service's National Fish Hatchery System.

Ken Burton, Public Affairs, Washington, DC While visiting Kofa National Wildlife Refuge in southwestern Arizona last February, area resident Norm McCauley stumbled across more than just the pristine desert landscape. He found a large, well preserved ancient ceramic bowl sitting upside down on the ground. McCauley left the artifact as it was and reported his find to Refuge Manager Ray Varney.

The Service notified tribal cultural resource officials from seven tribes in the region and eventually the bowl was returned to its rightful owners, the Yavapai-Prescott Indian Tribe.

"We felt that seven tribes had potential claims to the vessel," said David Siegel, historic preservation officer for the Service's Southwest region. "Because there are Yuman groups on the Colorado River and other Yuman tribes with ancestral ties to west central Arizona, they share a history of prehistoric occupation in the western Kofa Mountain district."

The Yavapai-Prescott Indian Tribe's History and Culture committee unanimously voted to register a claim of cultural patrimony because of the strong probability that the bowl belonged to their ancestors, the Tolkapaya. The Service accepted their claim.

"Of the seven tribes, only the Yavapai forwarded claim," Siegel said, adding "The Yavapai probably would have had the strongest claim had there been others. But, ultimately, the final decision was based on a preponderance of evidence, as provided by the Native American Graves Protection and Repatriation Act."

The Native American Graves Protection and Repatriation Act of 1990 allows the government to repatriate artifacts to federally recognized tribes, Alaska Native groups, and Native Hawaiian organizations, provided they originate from federal or Indian lands, or are in federal possession or control.

Archeologists believe the bowl Norm McCauley discovered may have been in the area for as long as 1,000 years. Because of its decorative lines and other traits, the bowl was likely used for ceremonial purposes. Today, the piece awaits display at the Yavapai-Prescott tribe's future cultural museum, another small piece of the tribe's identity reclaimed.

"That bowl represents us as a whole, as a group of people...we're putting back the pieces," said Tribe President Stan Rice as he accepted the bowl from Service representatives.

Ben Ikenson, External Affairs, Albuquerque, New Mexico

A friendly reminder...

Please be sure to check your station information in the Service's Corporate Master Table at http://cmt.fws.gov. This information is available to all Service employees and is being used to support national information systems, the Employees Pocket Guide, the Service's Office Directory on the Internet and telephone lists.

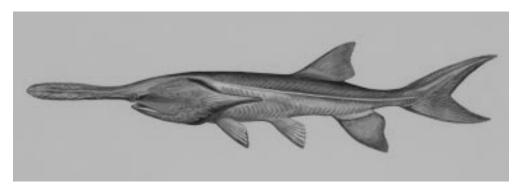
Therefore, it is critical that your organizational information is accurate and current for the benefit of every user. When a change is needed, contact your regional Corporate Master Table representative (for a list of reps, go to http://sii.fws.gov/r9data/standards/CMT_reps.html). If you

have any questions about accessing or using the system, contact Barb White at 303/275 2310 or barb_white@fws.gov. The system can be accessed using Microsoft Internet Explorer, the Service's Standard User Interface for national information systems.

To see your organization's listing in the Service Office Directory, go to http://offices.fws.gov, and click on "Searchable Database." This database also tracks your office e-mail and home page addresses, which are not included in the table. If the e-mail address or URL needs to be updated, have your Web manager update the information in the Internet Services Account Manager (http://nccmanage.fws.gov/).

New Service Products Hit the Streets

Answering Questions in Cyberspace



Model species. This image of a paddlefish is one of nearly 70 on the newly-released Duane Raver Art Freshwater Fish Collection. The National Conservation Training Center plans to release other image CDs over the coming year.

What do scrub habitat, the beauty of Alaska, and Southeastern fishes have in common? They are all the subjects of new products produced by the Service and the National Conservation Training Center.

The video "Restoring Scrub Habitat" explains what scrub habitat is and describes the important role it plays in recovering many of Florida's threatened and endangered species. The video also chronicles a cooperative scrub habitat restoration project on Merritt Island NWR—one that involved efforts by refuge, fisheries, law enforcement and ecological services staff.

"Kenai National Wildlife Refuge: Where Wildlife Comes First" lets viewers experience the beauty of Kenai NWR. Encompassing more than two million acres in south central Alaska, Kenai is a wildlife spectacle, home to bald eagles, salmon, moose, caribou and brown bears. Kenai is also a recreational wonderland where visitors can go boating, fishing and hunting, or engage in winter sports such as skiing, dog sledding and snowmobiling.

The two-CD "Duane Raver Art Freshwater Fish Collection" includes images of 68 Southeastern fishes painted by wildlife artist Duane Raver, commissioned by the Service. Accurately detailed, each fish is featured with background information and a thumbnail image in a booklet included in the CD case. The high- and low-resolution files are available in jpeg and tiff formats to accommodate both graphics users and Web page producers. All the images are copyright-free and may be used for Service exhibits, publications and Web pages.

Three more in the growing line of videos and CDs showcasing the Service's diverse programs and activities, these new products are easily adaptable for outreach use at conferences and special events, for local schools and by local news media.

Keeping an eye toward the future, the Service has also been exploring the possibility of offering videos and training tapes online.

To obtain copies of these products or a copy of the list of outreach products e-mail your name, address and phone number to elizabeth_jackson@fws.gov in the Image Library at NCTC.

Elizabeth Jackson, National Conservation Training Center, Shepherdstown, West Virginia Six years ago, when the Service went on the Web with a few home pages and began regular communication with the public via e-mail, few realized that the Internet would become as much a part of everyday business life as the telephone.

Things certainly have taken off. The Service's presence on the Web has grown exponentially—to the tune of 20,000 sites and more than 200 home pages. E-mail from the public has become nearly as common as written correspondence and may soon overtake postal mail as the preferred method of communication.

To keep up with the changing technology and manage the flood of e-mail, the Service implemented an informal system, creating a central address (contact@fws.gov) to receive incoming mail; using existing Web pages to address questions before the public feels the need to write to us; utilizing an automatic response feature on the Lotus Notes e-mail system; and screening and prioritizing messages that do find their way into our mailbox.

The most useful tool in responding to public inquiries is the national Frequently Asked Questions page (http://www.fws.gov/r9extaff/pafaq/pafaq.html). We have created several detours from the home page that encourage the public to visit the FAQ page before submitting questions via e-mail. We analyze incoming e-mail messages to craft new questions or update existing ones that will meet customers' needs.

Bird Smuggling Probe Yields Landmark Prosecutions

Another useful tool is the Lotus Notes automatic response feature, which sends a standard reply to the author of an incoming message to the contact@fws.gov address. The reply thanks the author for writing, explains that the Service cannot personally respond to each inquiry and routes customers to sites that can provide the most frequently requested information.

Finally, we screen messages that require personal attention for content, origin and urgency. Messages concerning topics already addressed in the frequently asked questions, for example, usually do not require further personal attention because the automatic response has steered the author to the answer.

We look for incoming messages from Capitol Hill, other federal agencies, state agencies, colleges and universities, and the media. We personally respond to those promptly or refer them to the appropriate office. Messages from schoolchildren and the public asking routine questions are handled as time permits, but we try to clear out all messages within a few days of receipt.

This system generates positive feedback from the public and has proven to be an effective outreach tool for reaching a large, diverse audience through the Web with minimal effort and expense.

Kathy Bender, Public Affairs, Washington, DC

Correction

On page 4 of the July/August issue, the photo credit should have read FWS photo: Scott Flaherty. The *News* regrets the error.

A 17-month cooperative investigation of an Ontario aviary by the Division of Law Enforcement in the Northeast region and the Canadian Wildlife Service exposed a complex tropical bird trafficking scheme and secured landmark penalties on both sides of the border.

In June, Canadian Johanne Flikkema, who owns and operates Flikkema Aviaries in Fenwick, Ontario, with her husband and son, was sentenced in federal court in Buffalo, New York, to serve six months in prison and pay a \$7,500 fine for smuggling protected African finches into the United States in violation of the Wild Bird Conservation Act, a U.S. law that prohibits the import of exotic birds taken from the wild.

Flikkema's sentence represents the first prison term meted out under the 1992 statute. The New York case, which was investigated by Service Special Agent Ellen Kiley, was only the second involving charges under the Wild Bird Conservation Act to reach the courts.

In July, Flikkema's husband and son were fined \$75,000 Canadian dollars by a judge in that country for their role in the family's smuggling operation. The fine is the largest ever imposed for wildlife trafficking under Canadian law.

"The Wild Bird Conservation Act shut down much of the exotic bird trade in this country, but illegal trafficking remains a threat," said Kevin Adams, Assistant Director for Law Enforcement. "Our work with counterparts in Canada and other countries helps protect species in the wild from global profiteering." The joint investigation showed that the Flikkemas illegally imported some 5,000 exotic birds—most of them African finches taken from the wild—into Canada through a supplier in the Netherlands. The birds, many of which were protected under the Convention on International Trade in Endangered Species, were falsely identified on invoices accompanying the shipments and entered Canada without the export permits required under that international treaty.

Some of the birds were then smuggled into the United States, where Service special agents and wildlife inspectors in Buffalo were already keeping close tabs on the company's business dealings. Videotapes of company shipments documented the undeclared presence of African finches, birds that cannot legally be imported into the United States under the Wild Bird Conservation Act.

In October 1999, Special Agent Kiley arrested Johanne Flikkema when she arrived at the airport in Buffalo with 220 of the small, colorful canary-sized birds; the finches were seized and placed at the Buffalo Zoological Gardens, which will continue to care for them. Agents also searched the premises of four U.S. businesses believed to be customers of Flikkema.

At the same time, Canadian Wildlife Service officers conducted a search at Flikkema Aviaries' offices and facilities in Ontario. They collected evidence needed to wrap up the investigation in Canada, where they filed more than 460 charges against Flikkema, her husband and son last February. Flikkema, who will complete her U.S. prison sentence in December, will be prosecuted in Canada when she returns to that country.

Sandy Cleva, Office of Law Enforcement, Arlington, Virginia

Minnesota Refuge Helps Out After Tornado

Partners Day Mines Good Ideas

On July 25, a tornado struck the small Minnesota River valley town of Granite Falls, Minnesota, injuring eight and killing one resident, damaging more than 300 homes, and displacing 71 families.

Minnesota Valley National Wildlife Refuge staff and other local Service employees lent a hand in the aftermath, donating and delivering two truckloads of water, food and supplies to the town days after the tornado struck.

When refuge volunteer coordinator Jana Ritch heard the damage reports from Granite Falls, she wanted to help in any way she could, especially in light of partnership ties between the refuge and the Dakotah Indian Nation along the Minnesota River. Ritch called the Upper Sioux Band near Granite Falls to find out what they needed and how badly the tribal community had been hit. The tribal housing community remained relatively untouched. However, the tribe members who lived in town, and the rest of the community, had been hit hard.

"Once I heard how great the needs were, it just didn't matter if these families were tribal affiliates or not, they just needed help," said Ritch.

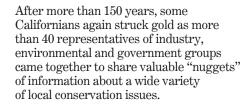
Minnesota Valley Refuge Manager Rick Schultz supported and encouraged Ritch's idea. Schultz requested assistance from the nearby Great Lakes-Big Rivers Regional office and the Twin Cities Ecological Services field office. In addition, Schultz offered personal equipment and a refuge vehicle to transport supplies if needed.

On the Friday and Saturday following the tornado, Paul Burke from the Twin Cities Field Office, Ritch, refuge biological technician Chris Kane, and Roy Wassather helped provide the Granite Falls community with two trucks of water donated and delivered by Glenwood Inglewood; 2,000 toiletry kits and another 100 gallons of water donated by Northwest Airlines; power bars from REI to feed the volunteers during cleanup; mattresses, medical gloves and bandages from a local medical mission service; shampoo, conditioner and various paper products from the Airport Hilton and Doubletree Hotels; and clothing and toiletry items donated by local Service employees. The donations were delivered in a moving truck donated by Mautz Paint of Little Canada, Minnesota.

Kane had spent two days in Granite Falls just before the tornado hit, making his contribution to the effort even more personal.

"I really enjoy the natural beauty of the Upper Minnesota River Valley," he said. "This was the perfect opportunity to give something back to the community."

Chuck Traxler, External Affairs, Minneapolis, Minnesota



The newly-opened Arcata Fish and Wildlife Office in northern California sponsored this Partners Day as a time for resource professionals from the local community to gather informally and discuss areas of mutual interest. Ideas flowed freely as participants mined a mother lode of positive suggestions, including:

- reaching out to the community to make endangered species recovery work effectively
- streamlining the permitting process for all federal projects, particularly for restoration projects
- encouraging Service personnel to participate in local chapters of organizations such as The Wildlife Society and American Fisheries Society

In response to these and other ideas, attendees shared information and possible solutions to problems. For example, in response to comments about permit streamlining, a Corps of Engineers representative mentioned a local working group currently meeting to look at ways to facilitate permit consolidation.

Arcata Deputy Project Leader Mary Knapp was enthusiastic about the results of the meeting.

"Attendance by resource professionals was far beyond expectations," Knapp said.
"I'm sure we'll reap the rewards in positive collaboration as we work with our partners in the months and years ahead. This type of meeting could be turned into a productive model for other field offices to nurture relationships and discover 'gold' in all areas of the country."

Allison Busch-Lovejoy, Arcata Fish and Wildlife Office, Arcata, California

Snake Invader Wreaks Havoc

The Guam flycatcher is extinct—not seen since 1984. The Guam rail is in serious decline, down to less than one bird per 100 kilometers from 80 per 100 kilometers in 1976. Geckos were extirpated from Guam.

It's difficult to predict the outcome of this growing hole in the island's ecological web, but the cause is well-known—the brown tree snake. This non-native predator has all but wiped out some of Guam's endemic fauna. But more is at risk than just the ecosystems of South Pacific islands far removed from the United States. Modern transport—domestic and military ships and planes—leaving the island of Guam have put areas outside the snake's present range at risk.

To help stave off a U.S. brown tree snake invasion, Bob Pitman, the Region 2 aquatic nuisance species coordinator, hosted the Brown Tree Snake Conference in Houston in June to mobilize concerned agencies.

"There's a good way to get in front of any invasion," said Pitman. "It's to prevent it from happening in the first place. And that's the purpose of holding the conference."

Cathleen Short, assistant director for Fisheries and Habitat Conservation and Aquatic Nuisance Species Task Force co-chair, agreed.

"Prevention, prevention," said Short in her opening remarks to the conference. "It's far easier to prevent the invasion of a nuisance species than to try eradication later."

The brown tree snake has been ecologically disastrous in Guam and there are many good reasons to prevent its invasion elsewhere, according to Pitman. The species poses a human health risk and has caused millions of dollars in damage from power outages.



Stay out. The
Service—along
with other
agencies—is trying
to prevent brown
tree snakes from
hitching rides to
the U.S. aboard
boats or airplanes.
FWS photo:
Gordon Rodda.

The brown tree snake is adaptable and could establish itself in the United States, particularly in the South. In south Texas, snakes turned up in military cargo sealed for several months. In Florida, Service law enforcement intervention kept brown tree snakes from entering the pet trade.

The conference attendees represented the network of professionals — from pet trade representatives to academicians — that will help prevent this insidious invader from getting a foothold in the United States.

"Prevention means we have to work together to keep this nuisance off our doorstep," said Pitman. "Coordination, cooperation and communications—that's what it will take and that's what we'll achieve through this conference."

"We have to keep this snake at bay," added Short. "It's hard to imagine a south Texas birding trail without birds—the silence would be deafening."

Craig Springer, Division of Fisheries, Albuquerque, New Mexico

An Ounce of Prevention

To keep brown tree snakes out of cargo leaving Guam, a number of methods have been employed:

- Snake fences, traps and flexible nylon netting tilted to prevent snakes from climbing aboard
- Jack Russell terriers which sniff out unwanted hitchhikers; keeping dogs is labor-intensive and expensive
- Traps baited with mice. Traps are effective but labor-intensive
- Fumigants like methyl bromide roust snakes out of cargo
- Toxicants like caffeine, aspirin and acetaminophen hold promise.

Educating the public, the pet trade industry and military personnel, may go a long way in preventing the spread of the brown tree snake.

Craig Springer

Finance Division Assists Managers

Communications Products Score Awards

While good management has long been emphasized, the Service is being treated to a "re-introduction" to the various procedures that make up management control, prompting Chris Jensen, chief of the Branch of National Finance Accounting in the Division of Finance, to remark that the Service now finds itself at "a unique moment" in its history.

A revived interest in controls has sparked a flurry of activity—with calls, faxes, and meetings occurring within the Service and between this agency and other Interior bureaus.

Management controls—the various management and accounting procedures an organization uses to ensure its program and financial activities are effective, efficient and legal—provide clear guidance to operating-level personnel on how to reliably ensure that an organization's programs are well managed and its finances are protected against unauthorized use.

As the "s" in "internal controls" implies, an effective system is not simply one event, but an ongoing process of safeguards, communications and assessments.

Though internal controls have long been a part of the Service's operations, management trends over the past decade have emphasized innovation at the expense of accountability. The improvements brought about by the efforts to make government more efficient often outpaced managers efforts to strengthen controls.

"Increasingly, recent audits of the Service contain findings and conclusions that point to the need to strengthen controls and provide assistance to managers in designing control systems," Jensen said, citing such audits as those conducted by the Inspector General on undelivered orders and grant management and the General Accounting Office's audit of Federal Aid.

The audit conclusions sparked interest in new initiatives such as the creation of a desktop reference on financial protocol for operating personnel, which will touch on such areas as the administrative control of funds, real and personal property, and cost recovery. In addition, the Division of Finance created the Branch of Accountability and Program Assistance to assist managers in integrating controls within their own offices.

The new branch will be headed by the Service's Pam Matthes and will "help Service managers identify management, compliance, or reporting issues before an external entity and provide managers with more flexibility in designing their own internal controls," said Matthes.

In addition, the Branch of Accountability and Program Assistance will act as an in-house consulting firm to identify beneficial business management practices and systems that can be adapted and shared among other users within the Service, according to Matthes.

The new branch will also assist managers in resolving audit issues and in conducting management improvement reviews at all levels of the organization.

Matthew Continetti, Division of Finance, Arlington, Virginia At the national conference of the Association for Conservation Information, held in Reno, Nevada, in July, several Service publications and a video took honors in the association's awards competition. Service award winners were:

- Region 1's outreach newsletter *Out and About* took second place in the internal communications category. *Out and About* has consistently won first or second place for several years, a reflection of its excellent design and writing and overall outstanding quality. The Region 1 *Field Guide to Outreach* took fifth place in this category.
- The National Conservation Training Center-produced video "The Journey Begins/The Tradition Continues—A Welcome to the U.S. Fish and Wildlife Service" took fourth place in the internal communications category. The script was written by NCTC employee David Klinger; NCTC employees Randy Lennon, George Gentry and Ryan Hagerty, and contractors Amber Perkins and Doug Canfield produced on the video. NCTC's Bonnie Schires served as the project officer.

Clark Announces Directorate Appointments

As Fish & Wildlife News was going to press, Director Jamie Rappaport Clark announced two Directorate appointments.

Marshall P. Jones was named Service Deputy Director. Jones had been acting Deputy Director since the retirement of John Rogers in May. Previously, he served as Assistant Director for International Affairs

Robyn Thorson was recently appointed Assistant Director for External Affairs. She replaces Tom Melius, who became Assistant Director for Migratory Birds and State Programs. Thorson worked for the Fish and Wildlife Service for 14 years; she rejoins the Service after spending 18 months with the U.S. Geological Survey in Seattle. Her most recent Service position was Deputy Director of the Alaska region.

Look for more information on Jones and Thorson in a future issue of *Fish & Wildlife News*.

Rachel F. Levin, Public Affairs, Washington, D.C.

Partnership Efforts Pay Off

■ The Region 3 website (http://midwest. fws.gov) was recognized for its outstanding design and accessibility, winning third place in the competition's Web category. A large part of the credit for this accomplishment goes to Region 3 Webmaster Larry Dean.

Also at the conference:

- Region 3 outreach coordinator Joan Guilfoyle was elected vice president for a two-year term, becoming the first federal employee to hold the position in the organization's 62-year history. Guilfoyle has served as secretary and as a member of the board. Spence Conley, assistant regional director for External Affairs in Region 5, continues as a member of the board through the 2001 conference.
- Guilfoyle and Craig Rieben, chief of the Service's Broadcasting and Audiovisual Office, continue their roles as State/Federal Liaison committee chairs. They are working with two state members to continue to define and refine how the Service can help the association in relations not only with the Service, but with other federal partners.
- At the July meeting, the ACI board confirmed that the National Conservation Training Center will be the site for the 2002 conference, providing an excellent opportunity to showcase the Shepherdstown, West Virginia, facility for many state partners who have not previously trained there. The Service and the state of West Virginia will coordinate program offerings. Steve Hillebrand of the NCTC Division of Education Outreach will head the Service's planning team for the conference.

The Association for Conservation Information is the national organization of state fish and wildlife agency partners in communication. Members include 41 states, the National Shooting Sports Foundation, National Wild Turkey Federation, Recreational Boating and Fishing Foundation, and the Service.

External Affairs, Minneapolis, Minnesota

David Klinger, National Conservation Training Center, Shepherdstown, West Virginia Established in 1987, the Service's Partners for Fish and Wildlife program provides private landowners with technical and financial assistance to improve native habitat on their property. Nationwide, the program has helped more than 21,000 landowners restore nearly a million acres of wetlands and related habitat, and some 2,700 miles of aquatic and riparian habitat.

In the Southeast region, efforts over the past decade have translated into habitat improvements on more than 135,000 acres of land and participation by 1,300 landowners. Partners participants in the Southeast have planted more than 75,000 acres of bottomland trees and 5,000 acres of endangered longleaf pine, restored 500 acres of native grass and prairie, and eliminated exotic species on more than 500 acres.

The Partners program in the Southeast has generated so much interest that the Service typically has a waiting list of landowners wishing to participate. Service biologists recognize the importance of such cooperative projects.

"The Partners program has been the most effective voluntary government assistance program I have witnessed during my 21 years of public service," said Ronnie J. Haynes, regional coordinator for Partners for Fish and Wildlife in the Southeast. "It is one of only a few programs that recognizes and supports the critical role the private landowner has in the protection, restoration and conservation of our nation's fish and wildlife resources."

During a meeting last summer, Southeast Partners program coordinators saw firsthand the results of this cooperation as they toured the Soque River Restoration Project on the Upper Chattahoochee River in Georgia. This river—located near the Atlanta metropolitan area—is designated as one of the most endangered rivers in the country.

The restoration project was conceived in 1998 when the Service formed a partnership with the nonprofit Upper Chattahoochee Riverkeeper coalition, the Environmental Protection Agency, and landowner Justin Savage. Savage had lost 60 to 80 tons of soil to the flooding Soque River over a two-month period.

As a result of state-of-the-art techniques used during the project, water quality and fish and wildlife habitat—especially for trout—improved significantly. Biologists reduced bank erosion by reconfiguring the channel to a more "natural" shape and pattern, altering stream dimensions such as width, depth and degree of curvation. The Upper Chattahoochee Riverkeeper continues to monitor this project and will conduct an aquatic invertebrate study this fall.

The Soque River Restoration Project involved more than 70 volunteers from the local community who helped plant more than 700 native trees and shrubs—including river birch, red maple and sycamore—to protect stream health and provide habitat for aquatic species, wildflowers, migratory birds and native wildlife. Erosion on Savage's property from the Soque River is now virtually non-existent, even after heavy rains.

Service officials agree the Partners for Fish and Wildlife program is one of the agency's most successful.

"Partners for Fish and Wildlife is a win-win program," said Southeast Regional Director Sam D. Hamilton. "Private landowners are the stewards of the vast majority of fish and wildlife habitat remaining in the Southeast. Through the Partners program, we can help meet the needs of both the landowner and wildlife."

Shari Brewer, Office of Migratory Birds and State Programs, Atlanta, Georgia

Return to Freedom! Captive-bred Puerto Rican Parrots Released

For the first time, captive-bred and reared Puerto Rican parrots have joined the last 40 of these endangered birds living in the wild.

The June release of 10 captive-bred parrots in Puerto Rico's Caribbean National Forest was the result of a 32-year combined effort of the Fish and Wildlife Service, U.S. Forest Service, U.S. Geological Survey and Puerto Rico's Department of Natural and Environmental Resources to help bring this species back from the brink of extinction.

"This is a great step forward for recovery," said Sam D. Hamilton, the Service's Southeast regional director. "While much work remains, this proves that if people work together we can help save endangered species, and in particular, the magnificent Puerto Rican parrot."

Largely emerald green with red foreheads, white rims around their eyes and blue feathers along the edges of their wings, Puerto Rican parrots stand less than a foot tall, one of the smallest members of their genus. They mate for life—reproducing once a year, between January and July—and are cavity nesters, predominantly using Palo Colorado trees. Puerto Rican parrots are now considered some of the most endangered birds in the world. A lack of suitable nesting cavities may be one of the main factors limiting the species' recovery.

In the 1930s, the Puerto Rican parrot population was estimated at only 2,000 individuals. Between 1953 and 1956, when Don Antonio Rodríguez Vidal conducted the first scientific study of this endemic bird, the population had dropped to only 200. Habitat loss from deforestation, as well as hurricanes, hunting, nest robbing and natural enemies—such as the red-tailed hawk and pearly-eyed thrasher—caused the drastic decline of the species.



Looking toward the future. Captive-reared parrots have joined wild birds in Puerto Rico as the Service looks to reestablish this critically endangered species. FWS photo.

In 1967, when only 24 individuals remained in the wild, the Puerto Rican parrot was listed as an endangered species. The population of parrots reached an all-time low in 1975 of only 13 birds in the Luquillo Mountains of Puerto Rico.

Without the intensive work carried out for the past three decades by the multi-agency Puerto Rican parrot recovery program the parrot would, in all probability, be extinct today. Just over a hundred captive parrots in two aviaries provide a sustainable source for release into the wild to bolster the current wild population, as well as for the eventual reestablishment of a second population elsewhere in Puerto Rico. "The Service is committed to continuing cooperative management of the Puerto Rican parrot recovery program," said Hamilton. "We propose to establish a national wildlife refuge in the karst zone of north-central Puerto Rico, which could serve as a site for establishment of a second wild population of parrots."

One captive-reared Puerto Rican parrot has died of unknown causes since the release. A second release is expected next year.

Tom MacKenzie, External Affairs, Atlanta, Georgia

Deliberate Acts of Outreach

Caught Red-handed and Dutifully Reported by Anita Noguera, National Outreach Coordinator

With all of the terrific photographs currently in the Image Library, we're taking advantage of the opportunity to create beautiful and informative computer screen savers to help us promote the mission of the Service.

Everyone who has a computer—at work, at school or at home—probably uses a screen saver. You can purchase screen saver software packages or download screen savers from Internet free software sites. The outreach team plans to develop screen savers using Service images and with links to Service Web pages, and offer them to targeted free software sites.

Kelly Geer, a team member who works in the Division of Endangered Species in Arlington, Virginia, is designing a series of Service screen savers. Working with images provided by Beth Jackson from the Image Library at the National Conservation Training Center, Kelly plans to develop screen savers about a variety of topics.

The first screen saver will feature endangered species because they are appealing and popular, and will attract various types of nature and animal lovers. As the images blend and move onto the screen, textual information will appear along with the images, giving the user information—and a convenient Service hyperlink—to entice them to visit our Web site to learn more.

Fish screen savers will be next. Since a new compact disk of Southeastern fish images has proven to be a favorite item (see article, page 14), making screen savers will be quick and easy.

Screen saver images from national wildlife refuges are a priority, especially with the upcoming refuge system centennial around the corner in 2003. Jackson's group is nearly done developing a refuges image CD.

Beth has also been monitoring and tracking downloads of the Service's images from the Internet and suggested other possible screen saver themes based on the download popularity of specific species such as wolves; deer; ducks and Federal Duck Stamps; bears; and bald eagles and other raptors

Another theme approach for a screen saver series is targeting audiences such as hunters, anglers and birders, and developing audience-specific screen savers with pertinent Service information about their particular interests.

Before these screen savers are launched on the Internet, we'll ask Service employees to preview them. This winter, we will post the screen saver software on the outreach page on the Service's Internal Internet for employees to download onto their computers. Keep checking http://sii.fws.gov/Outreach for the first release along with instructions.

Outdoor Classrooms Plant the Seeds of Knowledge

A group of second graders assemble at the banks of an artificial pond outside their portable classroom in a newly developed suburb of Oklahoma City. The bulldozer used to build a levee on one side of the pond could easily have been one used in the construction of many of the new homes in the neighborhood.

"There she is! There she is!" whispers an enthusiastic boy, pointing to a Canada goose nesting in the brush on a small island in the pond.

His classmates respond with matching enthusiasm and gather around for a better view. Their teacher explains that Canada geese prefer to nest in thickets on islands like this one because their eggs are protected from land predators such as squirrels and raccoons.

The children are learning about the ecosystem through a Service-sponsored Outdoor Environmental Classroom. Because environmental health depends on the actions of humans today and in the future, the Service knows that children are one of the nation's most important resources. In 1993, the Partners for Fish and Wildlife Program in Oklahoma extended its involvement to develop outdoor environmental classrooms across the state.

Service biologists involved in the program see it as a no-risk investment in the future of conservation.

"If the Service lost 95 percent of its budget, the Outdoor Environmental Classroom is at least one program that should remain," said Jontie Aldrich, Partners for Fish and Wildlife Program coordinator in Oklahoma. "The Service cannot do anything more intelligent than this."

During the 20-year projected lifetime of the 67 outdoor classroom projects in Oklahoma, an estimated two million students across the state will participate.

Ben Ikenson, External Affairs, Albuquerque, New Mexico

Adventures in Aerial Wildlife Surveying

Aerial surveys are conducted to allow for the study of habitats, wildlife, and ecosystems, and to provide resource managers with information that often determines important management techniques. The surveying efforts of the people behind the scenes merit more than mere applause. Their stories deserve to be told.

Early one June morning, Service biologist/pilot Jim Bredy and aerial remote sensing specialist Al Cilurso boarded a twin-engine Partenavia Observer aircraft to begin a journey that would span three weeks and thousands of miles, from the desert Southwest to the Arctic Circle to the Gulf of Mexico.

From Albuquerque, New Mexico, Bredy and Cilurso flew to Fort Smith, Canada, at the northeast border of Alberta and Northwest Territories to survey Wood Buffalo National Park, a 28,000 square-mile expanse of grasslands, forests and rivers that is home to the largest population of free-roaming bison in North America, and is the summer breeding grounds for whooping cranes.

Accompanied by Service whooping crane recovery leader Tom Stehn and his Canadian counterpart Brian Johns, the team counted pairs of cranes and their chicks, and mapped the habitat types and area the cranes currently use. These aerial range nesting and production surveys are conducted annually, but photographic surveys are performed only as new breeding territories or other significant changes develop.

Bredy says crane surveys are probably the most difficult flying he does all year.

"Once I spot cranes, I have to make several passes just above the birds, dropping below the tree tops into forest openings to enable observers to read color bands on the birds' legs and record chicks present," he says. "In addition to keeping one eye on the instruments and one eye out for tall snags, I also have to be sure I don't lose the cranes in the maze of small ponds that stretch toward the horizon."

More difficulty was yet to come, though. On the evening of June 16, a sweat-drenched Cilurso was rushed to Fort Smith Health Center where is was discovered he had a kidney stone. Just a day after the agonizing medical procedure, though, Cilurso was back on the job.

While Cilurso was in the hospital, Bredy had flown to Edmonton for a required maintenance inspection and to retrieve parts for his broken aerial photography system. Several removals and reinstallations of the system proved useless and finally the camera was replaced by an alternate digital camera/video system.

After Cilurso had healed and the team had completed visual surveys of cranes and video documentation of habitat conditions—approximately 25 flight hours—Bredy and Cilurso took to the air again. Inuvik, in the Northwest Territories, served as their base of operations as the team shot aerial footage of snow goose nests and documented habitat conditions on Banks Island, north of Inuvik in the Beaufort Sea.

What they saw there was remarkable: hundreds of musk oxen and caribou stampeded over the barren landscape; mile-wide sheets of ice lay on the sea; fingers of frozen streams cut lines across the Arctic desert. At one site, the team estimated half a million snow geese.

"It seemed we were flying mile after mile and the stream of snow geese nests kept coming and coming," Cilurso said.

Unfortunately, these high numbers mean overcrowding on nesting grounds, posing a significant threat to the fragile Arctic habitat, used by other bipeds as well. Fortunately, this year—because of heavy snows during the breeding season—production is expected to be much lower than it has been in recent years.

Bredy and Cilurso's aerial surveys not only help determine the numbers of existing nests, but they are also used to determine hunting regulations in places as far off as Chihuahua and Tamaulipas, Mexico, where some of the Canadian breeding birds winter. After five days in the Arctic tundra, the aerodynamic duo completed their surveys and headed to the opposite weather extreme on the humid Texas coast, where they began surveying nesting alligators.

Because of poaching for meat and skin, the American alligator was listed as an endangered species in 1970. As a result of successful recovery efforts, however, American alligators have been multiplying over-abundantly, and have affected fish, furbearer, and duck populations. Like snow geese, alligator populations are now too high.

Bredy, Cilurso and wildlife biologist Jim Neaville of Chenier Plains National Wildlife Refuge Complex surveyed alligator nests on 285 aerial miles of grid-pattern transsects on the complex.

Timing is critical in nest surveying. In recent years, the end of June has been the ideal time for these surveys, when alligators tear up march plants and use the dead vegetation to build mounded nest 10 to 20 feet wide, where they lay as many as sixty eggs. When surveying at just the right time, the circles of dead vegetation are distinct from the air. Bredy and his colleague easily counted as many as 100 nests.

Having completed their assignments, Bredy and Cilurso headed back to Albuquerque to record some of their findings and report to management.

One would assume that, after a journey that accumulated a total of 13,000 miles and 80 flight hours, this pair would enjoy a little R & R. But, the fact is, these men don't know how to relax on the ground. After a week or so, they would be itching for their next assignment and their next adventure. Because, in their hearts, there is simple, pure, unconditional love of flying, and of the job.

Ben Ikenson, External Affairs, Albuquerque, New Mexico

Boating and Fishing Outreach Campaign Gains Momentum

The Recreational Boating and Fishing Foundation took a key step in its campaign to increase boating and fishing participation and aquatic stewardship this summer, awarding its communications account to The Richards Group, an award-winning Dallasbased creative agency responsible for a number of successful advertising campaigns.

The core strategy theme for the campaign is: "Time spent on the water connects people."

At a press conference during the Outdoor Writers Association of America's annual conference in June, Foundation CEO Bruce E. Matthews announced the account.

"The Richards Group offers Recreational Boating and Fishing Foundation stakeholders exactly the right combination of skills—creative, media strategic—to enable us to build an exceptional national campaign," Matthews said.

Over the summer, Matthews and Dave Kroencke, a principal at The Richards Group, visited with a number of audiences to describe the initial strategy for the national campaign.

Based on the research review conducted for this campaign, phase one will target "infrequent and lapsed anglers," with a focus on extended families. Research findings include:

- 58 percent of people have fished before and probably like fishing, but have not fished recently.
- 24 million adults currently own a fishing rod but have not fished in the past year.
- More than two-thirds of these people are male. They are ethnically diverse and most are between the ages of 30 and 54, married with children, and living in urban or suburban areas.
- Spending time with family and friends is the single most powerful motivator (33 percent) to get a lapsed or occasional angler back to the water.



A family affair. A review conducted for the new boating and fishing outreach campaign found spending time with family to be the most powerful motivator to get anglers back on the water. FWS photo.

The campaign will focus on both boating and fishing, using insights gained from the extensive body of research on fishing participation, with additional effort to conduct research on boating participation.

"Few experiences replicate the fishing and boating experience," said Kroencke. "When families get away from the pace, distractions and hyper-stimulation of life, they relax, talk, share, laugh and reconnect. It is within these moments that family life is most valued.

"Lessons about life and the importance of nature are often learned and passed between generations while on the water," he concluded.

Foundation CEO Matthews agreed.

"If we can both increase participation through appealing to family cohesiveness values and increase stewardship value associated with buying a fishing license, we can move the needle in the right direction," he said.

The national advertising campaign was unveiled during Boating Week on September 26 in Orlando, Florida, and advertisements will air in 2001.

The Recreational Boating and Fishing Foundation is a nonprofit organization whose mission is to implement an informed, consensus-based national outreach strategy that will increase participation in recreational angling and boating and increase public awareness and appreciation of the need to protect, conserve and restore the nation's aquatic resources.

Federal funding for the foundation comes from federal user taxes on sportfishing equipment and motorboat fuel, and is authorized by the Sportfishing and Boating Safety Act of 1998, an amendment to the Sport Fish Restoration Act of 1950. The Service allocates funds under two cooperative agreements.

For more information about the Recreational Boating and Fishing Foundation, visit the foundation's Web site at http://www.rbff.org.

Phyllis Dickerson-Johnson, Recreational Boating and Fishing Foundation, Alexandria, Virginia

Ecosystem Approach Initiatives



Southern Appalachian Ecosystem: Diverse People Conserving Diverse Resources

Lush green mountains, blue skies and historic venues greeted members of the Southern Appalachian Ecosystem Team at their spring meeting in Abingdon, Virginia.

The team is a model of cooperation, reflecting the ecosystem's location in two Service regions—the Southeast and Northeast—and the group's commitment to embrace stakeholders inside and outside the Service. Attendees at the May meeting—including field and regional office representatives from the Realty, Fisheries and Ecological Services programs, and representatives of local universities, state wildlife agencies, an aquatic research organization and two conservation organizations—exemplified the diversity of stakeholders.

The Southern Appalachian ecosystem encompasses some 50,000 square miles in Virginia, North Carolina, South Carolina, Tennessee, Georgia, Alabama and Kentucky. The Southern Appalachians region is known worldwide for its diverse assemblage of plants and animals—a result of its variable climate, its topography and the area's rich geologic past.

One of America's most significant hot spots for biodiversity, the Southern Appalachians are home to the world's richest concentration of freshwater mussels, crayfish, salamanders and cave creatures. The area is also a major center for divergent evolution in freshwater fishes.

Unfortunately, much of this diversity is imperiled. The Southern Appalachian Ecosystem Team's primary focus is on recovering habitats that harbor imperiled species, including streams, mountain bogs, caves and spruce-fir forests. Current team activities include supporting the establishment of a new national wildlife refuge for highly imperiled mountain bog wetlands; continuing surveys and recovery of imperiled fishes such as slender chub and yellowfin madtom; and augmenting freshwater mussel populations in the upper Tennessee River basin.

Team members are also involved in stream restoration projects through the Partners for Fish and Wildlife Program and the Endangered Species Landowner Incentives Program.

The issue of invasive pest plants is a highly charged subject in this ecosystem. Team members, along with the federal/state Southern Appalachian Man and The Biosphere Cooperative, are bringing stakeholders together to find workable solutions to exotic plant issues. In addition, ecosystem team members are involved with the newly established Georgia Exotic Pest Council which will be working with agencies and native plant producers to reduce the adverse effects of exotic plants on Georgia's native plants and animals.

A variety of outreach activities keep team members busy, as well. Highlights include a Southern Appalachian Creature Feature commentary on a National Public Radio affiliate that reaches approximately 77,000 people in the Southern Appalachians. The team also helped create an environmental education center at Chattahoochee National Fish Hatchery.

Another team project, a proposed new refuge along the Tennessee River, would be a collaboration of efforts, money and staff by the Tennessee Wildlife Resource Agency, the Foothills Land Conservancy and the Service. The Foothills Land Conservancy has already pledged \$1.9 and the state anticipates contributing \$2 million in state funds towards the purchase of the new refuge.

The rich agricultural fields within the Tennessee River floodplain attract cranes and other waterfowl on their migration from northern nesting grounds. Based on team agreement that the new Yuchi National Wildlife Refuge—named for the Native American tribe in the area—is a sound conservation idea, a pre-project investigation report has been submitted to the Southeast Regional office. Partners will continue to pursue supplemental outside funding sources.

Other lands initiatives being pursued by the team included a discussion of possible refuges in Tennessee, North Carolina and Georgia, and the proposed Clinch River NWR in southeastern Virginia.

Sandy Tucker, Ecological Services, Athens, Georgia

Exploring Our Past



Essential Tensions: A Historical Perspective on the Evolution of the Service

As the Service's mission has changed over the years its organizational structure has likewise changed. Yet, in spite of these growing pains, the Service has weathered storms and enlarged and enriched its role as the premier wildlife conservation agency in the nation.

Now, as the Service is poised to embark on a new chapter in its organizational existence, it is worthwhile to take a look back at just a few watershed moments in the agency's organizational past.

1903-1920: Birth of the Refuge System

Prior to 1903 the Bureau of Biological Survey—a Service forerunner, at that time a part of the Department of Agriculture—had been a largely landless agency with important roles in animal damage control and biological research. When Theodore Roosevelt created the first refuge at Pelican Island this did not immediately change; for although Roosevelt created 53 federal refuges and bird reservations between 1903 and 1909, he could not produce funds for them.

In the early years of the refuge system, managers—then called wardens—were paid by the American Ornithologists' Union and the Audubon Society. No funds were made available to purchase land for the refuge system until 1929.

1915-1931 "Varmints or Wildlife?"

The Bureau of Biological Survey had its origins in addressing issues of concern to farmers. As early as 1887, the Commerce Department's Division of Economic Ornithology and Mammalogy was developing poisons for rodents and birds injurious to crops. In 1915, Congress gave the bureau \$125,000 to initiate predator control activities.

However, voices of protest emerged within the agency itself. Some bureau biologists argued that killing the predators of rodents and other "vermin" defeated their own rodent control efforts.

Change began to occur in 1936 when predator killing was banned in national parks—a policy the Bureau of Biological Survey originally opposed but later accepted. In 1985, the bureau's remaining responsibilities were moved to the Department of Agriculture.

1934: Ducks and Dust

The economic dislocations of the Great Depression transformed the nation's premier predator control agency in unpredictable ways. As the wheat fields of North America dried up so did many of the wetlands necessary for migratory waterfowl to breed. By the early 1930s the winds brought hunters more dust than ducks, and drastic measures were required. President Franklin Roosevelt appointed a committee in January 1934 to find a means to conserve migratory waterfowl.

The committee recommended reorganizing the Biological Survey and expanding the amount of land set aside for migratory waterfowl. With surprising swiftness both occurred as J.N. "Ding" Darling became the new chief of the Bureau of Biological Survey and Roosevelt signed the first Duck Stamp Act.

Darling and Refuge Chief J. Clark Salyer greatly expanded the national wildlife refuge system in this era of unprecedented funds, Civilian Conservation Corps labor, and depressed and abandoned land.

What had begun as the nadir for both ducks and the administration of the Biological Survey in the early 1930s had been transformed into an expanded and innovative new organization by the early 1940s.

1942-1947: War and Wildlife

The Service had been formed in 1940 by combining the Bureau of Biological Survey and Bureau of Fisheries and moving both to the Department of Interior; the agency was forced to move its headquarters to Chicago, as part of a wartime effort to move non-essential functions out of Washington, D.C. The successful expansion of the national wildlife refuge system in the previous decade now exacerbated the difficulties of managing a larger resource with severe shortages of labor and funds.

1957 to the present: Division, Then Coordination

The Fish and Wildlife Service was divided into two agencies in 1957: the Bureau of Commercial Fisheries and the Bureau of Sport Fisheries and Wildlife. The split bureaus were further parted in the 1970s, with the Bureau of Commercial Fisheries going to the Commerce Department as the National Marine Fisheries Service.

Another important turning point came in 1980 as President Carter signed the Alaskan National Interest Lands Conservation Act. ANILCA greatly increased the acreage of the National Wildlife Refuge System and created nine refuges in Alaska, including the vast Arctic NWR, which doubled in size. Arctic's coastal plain was also declared a Wilderness Area. The act also required that the potential impacts to wildlife and habitat of gas and oil development in the northwest corner of Arctic refuge be studied closely before such development could begin. Today, Alaska's 16 refuges encompass more than 85 percent of the 93-million-acre refuge system.

Conclusion

These are a few of the past challenges the agency has weathered. New mandates such as the Endangered Species Act emerged and the research function of the Service, which dates back to the original predecessor agencies, was recently consolidated into the U.S. Geological Survey, creating new challenges and partnership opportunities.

Mark Madison, National Conservation Training Center, Shepherdstown, West Virginia

Fish & Wildlife Honors

Transitions... Who's Coming and Going

Maine Project Leader Receives Award from Alma Mater

At the commencement for Bard College in Annandale-on-Hudson, New York, 1973 Bard alumnus Stewart I. Fefer, project leader for the Service's Gulf of Maine Coastal Ecosystems Program in Falmouth. Maine, received the John and Samuel Bard Award in Medicine and Science. Fefer has worked to protect Maine's wildlife habitat, including restoration of seabird habitat and wetlands and removing dams that blocked migratory fish. A champion of using partnerships to increase the effectiveness of habitat protection, Fefer's biggest concern is population sprawl and educating people to make better decisions about the effects of development on the environment.

Region 2 Agent Recognized for Superior Service

Southwest Region Special Agent Kevin Ellis recently received a Department of the Interior Superior Service Award. In a formal letter, Director Jamie Rappaport Clark recognized Ellis as a "superior criminal investigator in the Division of Law Enforcement." In 1999, Ellis received a Special Commendation Award from the Department of Justice for his investigation into bounty hunting on federal lands. His efforts uncovered a group of ranchers who hired a bounty hunter to shoot mountain lions which resulted in convictions of 15 Lacey Act violations and \$90,000 in fines. Ellis was also recognized in 1998 by the

U.S. Attorney for the District of Arizona as the Environmental Investigator of the Year. He was lauded for his work uncovering illegal bounty hunting, as well as for his undercover investigation into the illegal killing and sale of golden and bald eagles which resulted in 40 convictions.

Student Awarded Natural Resources Scholarship

Nichole Allison was awarded the Silvio O. Conte Memorial Scholarship from the Service's Northeast region, the National Fish and Wildlife Foundation, and the University of Massachusetts at Amherst. Allison received a bachelor's degree from the university in wildlife and fisheries conservation last May, and will work for the Division of Refuges in the Northeast regional office before beginning graduate studies next year. The Conte scholarship fund was established with gifts from the Service and the foundation to recognize graduate students in fisheries and wildlife ecology and conservation, natural resources policy and administration, or ecology; it was named for the late Congressman Silvio O. Conte, a conservationist who was instrumental in bringing the Northeast regional headquarters to its present location in western Massachusetts. The university matches the scholarship with in-kind contributions of tuition waiver, room and board or other expenses.

The Service's new Native American liaison is **Patrick Durham**, formerly the technical services director for the Native American Fish and Wildlife Society, a nonprofit organization that advocates the protection, preservation and wise use of tribal natural resources. Durham has also worked for the Bureau of Indian Affairs, the U.S. Forest Service and U.S. Senator Strom Thurmond. He pioneered development of the Fish and Wildlife Service's Native American Conservation Officer Training Program.

Dr. James D. Brown has been named as the Native American Liaison for the Southeast region, where he will be responsible for coordinating the Service's activities with the federally recognized Native American tribes in the Southeast region's 10 states. A Service employee for 27 years, Brown has worked for the Service in Raleigh, North Carolina, Washington, D.C., and the Southeast regional office in Atlanta.

The Region 9 Division of National Fish Hatcheries in Arlington, Virginia, recently announced several new appointments: Walter Boltin and Robert Pos are attached to the operations team, which is in charge of alignment reforms, production activities, infrastructure, and authorities of the hatchery system. Richard Christian and **Kyle Flanery** are part of the policy, budget and legislation team, which coordinates the hatchery system's strategic plan, budget management, and congressional initiatives. **Richard Van Hoosen** is a member of the fish culture science and technology team, which oversees evaluation, fish health, fish technology and production planning.

Jim Savery, who served as the first—and only—manager for Pocosin Lakes National Wildlife Refuge in North Carolina, is now the refuge manager at Bosque del Apache refuge in Socorro, New Mexico. While under Savery's management, Pocosin Lakes refuge, located in Creswell, North Carolina, merged with Pungo NWR and grew to 113,674 acres.

Tim Cooper is the new manager at Moosehorn National Wildlife Refuge, in Baring, Maine, where he will be responsible for more than 24,500 acres of refuge land, approximately one-third of which is designated as federal wilderness. Cooper has worked most recently as the deputy refuge manager

Nominations Open for Wildlife Management Institute Awards

The Wildlife Management Institute is accepting nominations for its prestigious Touchstone and President's awards for 2001. Programs in any natural resources discipline, developed within the past 24 months, are eligible for nomination. The President's Award honors a federal, state or provincial natural resource agency's division, department or office that has enacted a program to substantially advance the application of scientific resource management, and/or public understanding of the need for scientific fish and wildlife management. The Touchstone Award recognizes the achievement of a program or professional(s) in the public or private sector for efforts that substantially advance resource management. Nominations must

include a letter specifying the names and addresses of the nominee(s) and nominator(s) and a brief synopsis of the accomplishment, including its origin and dates. Nominators should provide the names and phone numbers of three individuals other than nominee(s) who can give independent testimony about the value, scope and other merits of the achievement.

Nominations for the 2001 awards are due before December 1, 2000 to: WMI Awards, WMI, Suite 801, 1101 14th Street NW, Washington, DC 20005; email: WMIRM@ aol.com, or fax to 202/408 5059. Contact Richard McCabe at 202/371 1808 for information.

Fish & Wildlife...In Brief

at Laguna Atascosa NWR based in Rio Hondo, Texas. He began his career with the Service nine years ago in Scottsbluff, Nebraska, at Crescent Lake NWR, where he monitored the refuge grazing program and duck production.

The Service recently named **Tim Bodeen** as project leader for Grand Kankakee National Wildlife Refuge in northwest Indiana. Bodeen formerly worked at Neal Smith NWR in central Iowa. As project leader for Grand Kankakee refuge, Bodeen will work cooperatively with the Army Corps of Engineers, state and local governments, area landowners, businesses, and private groups to develop the refuge. Bodeen has also worked at the Fergus Falls Wetland Management District in Fergus Falls, Minnesota.

In Memoriam

Laurence Jahn, a respected and influential conservationist dedicated to advancing integrated natural resource management, died in August. A wildlife biologist, Jahn worked for the Wildlife Management Institute in a number of capacities. Jahn also served on the wildlife advisory council of the Senate Agricultural Subcommittee on Soil and Water Conservation, the National Coordinating Committee on Fish and Wildlife in Federal Water Resource Projects, and advisory committees to the departments of State, Commerce, Agriculture, Defense and Interior. A scholarship fund has been established in his memory; donations may be sent to the Laurence R. Jahn Memorial Fund, c/o Wildlife Management Institute, Suite 802, 1101 14th Street, NW, Washington, DC 20005.

Creator of Wildlife-oriented Television Segment Dies

Robert "Shad" Northshield, a longtime friend of the Service, died in August. He created "CBS Sunday Morning" in 1979 and featured a wildlife-oriented segment at the end of each show. Northshield also was influential in the program's annual "Our Gifts to Ourselves" segment, which often featured the National Wildlife Refuge System. The show's trademark continues to be lengthy closing shots of nature that run up to 2 minutes with only natural sound.

Airshow Highlights Crane Partnership

The Service's exhibit at the annual Oshkosh Airshow in Wisconsin highlighted its Whooping Crane Eastern Partnershipnine states, two non-profit organizations and two federal agencies. Through photographs, videos and handouts, visitors learned about this exciting five-year project aimed at establishing a migratory flock of whooping cranes between the Midwest and northern Florida through use of ultralight aircraft. The Service's Aviation Program also exhibited a 206 Cessna Amphibian aircraft at this year's show. The theme for next year's show is how the Service's aviation program assists wildlife management projects throughout North America.

Federal Duck Stamp Winner Hometown Event

The Service feted the 2000-2001 Federal Duck Stamp during events in Washington, D.C., and Elyria, Ohio, 22-year-old Duck Stamp artist Adam Grimm's hometown. During a June 30 ceremony at Washington's National Postal Museum, hunters, collectors and other Duck Stamp fans purchased stamps and other items and got their stamps hand-canceled by the Postal Service. On July 22, some 400 guests attended a family-oriented event at Grimm's high school alma mater. Live birds—from a six-foot Andean condor to a six-inch American kestrel-entertained guests, and silent auction and raffle items netted more than \$10,000 for two wetland restoration projects in the state. The Service spearheaded a team of 25 local residents—from the philatelic community, the Ohio Division of Wildlife, art schools, Ducks Unlimited, Pheasants Forever, the Postal Service, Ottawa National Wildlife Refuge and the Grimm familyto pull the hometown event together.

Getting to the CORE of Workplace Disputes

Following a successful 2-year pilot program in Region 2, the Interior Department has implemented its CORE (COnflict REsolution) program, a significant step toward resolving some of the chronic conflicts that can gnaw away at otherwise healthy work environments. Neutral CORE specialists help opposing parties in minor workplace disputes come up with creative approaches to alleviate conflict and work toward mutually agreeable solutions. Participation in this program is voluntary for all parties. Each Interior Department bureau now has CORE specialists who provide in-house conflict resolution assistance to all employees, including supervisors and mangers, and employees in bargaining units that have signed an agreement to participate. CORE specialists are fully trained and certified in conflict resolution techniques, including mediation. A comprehensive certification examination for CORE specialists is now in development. For more information on CORE, access the program Web site at http://www.doi.gov/ core/or contact the Service CORE Dispute Resolution Manager, Steph Smith at 304/876 7485.

Michigan Office Sets a Trend in Outreach Education

The East Lansing, Michigan, Ecological Services field office initiated education and outreach partnerships with Minorities in Agriculture and Natural Resources Association and the Young Spartan Program at Michigan State University, exposing more than 100 elementary school children to natural resources issues. Eco-Explorers Science Club is an enrichment program designed to give under-represented students hands-on experience with environmental issues through activities centered around the food web, birds of prey, water quality, wetlands, endangered species and watershed management. After completing this program, the children had not only learned about science, but also gained valuable leadership, team building and social skills The program has received rave reviews from parents, teachers, administrators and most importantly—students themselves, who attest to an increased interest in science, improvement in school achievement, and new found appreciation for the earth and environmental concerns.

The Thin Green Line

Aldo Leopold once said that there is no conservation without enforcement. In the Service, the role of law enforcement is changing. Whereas once the focus was on nabbing those who broke wildlife laws, in recent years it has broadened to include overseeing the international wildlife trade, forging proactive partnerships with industry groups and monitoring habitat conservation plans. Additionally, our special agents, wildlife inspectors and refuge officers increasingly confront dangerous non-wildlife crimes such as drug trafficking and homicide.

The Service has the world's leading wildlife law enforcement operation, with an internationally renowned cadre of dedicated professionals, a cutting-edge forensics lab and an officer-casualty total of zero on our national wildlife refuges. But the Service's Division of Law Enforcement is in trouble. It has not received adequate funding in 15 years. For the past five years, funding has remained flat.

The result: we cannot hire, pay, train, equip or support our authorized number— 345—of agents and inspectors. With only 298 positions presently filled, the division has fewer staff nationwide than the Customs Service has in Miami alone. These officers lack the means to travel, perform investigative work, buy gasoline and purchase basic safety equipment.

On refuges, we have an equally skeletal crew. In Alaska, we have one law enforcement officer for every 1.86 million acres, while in the lower 48 the ratio is one officer for every 27,400 acres. Further, only 10 percent of our 620 refuge officer positions are full-time law enforcement staff; the rest are primarily managers, biologists, recreational planners and others who perform enforcement duties on a part-time basis.

Our thin green line is getting thinner. In the next five years, many of our enforcement professionals will be eligible for retirement. By the end of 2001, our Division of Law Enforcement could have as many as 100 vacancies. Many refuge law enforcement personnel have filed retirement packages as well.

I am committed to maintaining the high quality of our enforcement operation. To do so, we must secure funds to hire new recruits and give veterans the resources to do their jobs. We need better career positions, advanced training and top-of the line equipment.

To this end, I continue to fight for budget increases for the Division of Law Enforcement and I remain determined to take concrete action to improve the state of our entire law enforcement operation. With respect to refuge officers, for example, we are working with the Inspector General's Office to develop an assessment tool that will determine specifically what areas need improvement.

Despite the limitations, our resourceful enforcement professionals are devising new tactics to get the job done. Law enforcement has been the catalyst for a number of the Service's most important partnerships with the electric power industry, for instance, to address raptor electrocutions, and with the petroleum industry, to address problem oil pits often mistaken for ponds by migratory birds.

Our law enforcement professionals have long been the best at what they do. But to keep that edge, we need adequate funding and adequate staffing. We need young men and women to follow in the courageous and pioneering tradition of Paul Kroegel, the first refuge officer, and U.S. Game Warden Edgar Lindgren, the first Service employee to die in the line of duty. And we need to support them fully so they can continue to make a difference in all that we do for wildlife.

I am happy to be able to report that the news is looking better for Law Enforcement these days as Congress recently approved an \$8.3 million budget increase to rebuild Law Enforcement and fill special agent vacancies. This is especially exciting because the budget increase came back from committee exactly as the Service requested it. The Service also received \$2 million specifically to address the Law Enforcement maintenance backlog.



Fish & Wildlife News

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